

## AMENDMENTS TO THE CLAIMS

Please amend claims 1, 2, 4-9, 11, 13-17, 19, 21-24, 26, 28-33, 35-38 as follows:

### 1. (Currently Amended)

An adjustable swivel base assembly comprising:

(a) a planar mounting base plate defining a first major plane,

(b) a pair of laterally spaced apart columnar supports affixed at a first longitudinal end thereof to said base plate and extending therefrom generally perpendicularly ~~therefrom~~ relative to the major plane thereof,

(c) a planar bearing plate defining a second major plane and being stationarily supported on a second longitudinal end of said supports opposite said first longitudinal end thereof,

(d) a planar first bearing defining a third major plane and being stationarily supported on said bearing plate on ~~the~~ a side thereof remote from said supports,

(e) a planar second bearing defining a fourth major plane and being stationarily affixed to said bearing plate and spaced from and coaxial with said first bearing, said major planes being oriented generally parallel with one another.

(f) a planar rotatable swivel plate supported on and sandwiched slidably between said first and second bearings for rotation in a plane generally parallel to said major ~~planes of said base plate and of said first and second bearings~~, said rotatable swivel plate being adapted to carry a load to be swiveled by said rotation of said rotatable plate, and

18 (g) an indexable locking system for selectively locking said rotatable swivel  
19 plate in any one of a plurality ~~on~~ of angularly spaced positions.

## 2. (Currently Amended)

1 The assembly set forth in claim 1 wherein said supports comprise a pair of  
2 ~~obround~~ risers each having an obround exterior contour and being symmetrically mounted to  
3 said base plate and having generally flat facing surfaces with an angled orientation relative to  
4 one another such that ~~their major planes~~ said facing surfaces define an included angle  
5 therebetween of about 40°.

## 3. (Original)

1 The assembly set forth in claim 2 wherein each said riser is made as an aluminum  
2 extrusion having a cross sectional contour to form the obround contour whereby the riser has  
3 parallel flat side walls merging with semicircular end walls.

## 4. (Currently Amended)

1 The assembly set forth in claim 3 wherein the interior surface of each said  
2 semicircular ~~curved-riser-end~~ wall has individually associated therewith an integral,  
3 longitudinally extending screw boss defining an interior channel with a circular wall surface  
4 encompassing about 270° and having a diameter for slidably receiving therethrough an  
5 associated mounting screw inserted through an associated hole in said base plate and threadably  
6 secured at one end thereof in said bearing plate such that said bearing plate is fixably and

7 securely screw-mounted on and supported by said risers which in turn are thereby securely  
8 screw-affixed to and supported by said mounting base plate.

5. (Currently Amended)

1           The assembly set forth in claim 1 wherein said swivel plate has a central through-  
2 hole defined by a bearing bore extending from a planar first side of said swivel plate adjacent  
3 said first bearing to a junction at an annular shoulder with a bearing counterbore in said swivel  
4 plate that in turn opens to a second planar side of said swivel plate remote from said first bearing,  
5 and wherein said first bearing has a raised circular central bearing boss received with a close  
6 clearance sliding fit in said bearing bore such that the said first side of said swivel plate rides  
7 slidably on an adjacent surface of said first bearing that encircles said central bearing boss of said  
8 first bearing boss, and wherein said second bearing also has a bearing boss portion that fits  
9 slidably within said plate bearing bore and has a radially extending marginal flange portion that  
10 rides slidably on said annular shoulder of said swivel plate through-hole defining said bearing  
11 bore and wherein said swivel plate is clamped by and between said first and second bearings,  
12 both of which are held affixed by studs extending to and fastened to said bearing plate.

6. (Currently Amended)

1           The assembly set forth in claim 5 wherein said first and second bearings are made  
2 of plastic ~~such as ultra high molecular weight (UHMW) polyethylene plastic material, and~~  
3 wherein said first and second ~~plates~~ bearings are backed up ~~with metal plates both top and~~  
4 ~~bottom, i.e., respectively by~~ a second metal bearing cover plate overlying said second bearing  
5 and ~~by with~~ said bearing plate with said bearing plate being made of metal, and ~~further including~~  
6 ~~fasteners wherein said studs are~~ constructed and arranged such to extend through the assembly of  
7 said first and second bearings as well as said second metal bearing cover plate and said bearing  
8 plate and tensioned to a predetermined torque to minimize play or loose fit of said swivel plate  
9 and yet still allow the rotatable swivel plate to swivel freely relative to the remaining  
10 components of said base assembly.

7. (Currently Amended)

1           The assembly set forth in claim 1 wherein said swivel plate is provided with a  
2 predetermined universal pattern of threaded through-holes ~~adjacent one side of said swivel plate~~  
3 ~~bearings, as well as a mirror image symmetrical array of similar mounting holes adjacent the~~  
4 ~~other side of said swivel plate bearings,~~ said through holes being predetermined by design to  
5 match up with the mounting bolt pattern ~~of the most popular models~~ of downrigger mounting  
6 platforms of various configurations that are to be removably attached to said rotatable swivel  
7 plate by mounting fasteners ~~such as thumb screws, threaded studs or the like.~~

8. (Currently Amended)

1           The assembly set forth in claim 1 wherein said indexable locking system  
2 comprises a negative gear-like profile formed in said a side face of said swivel plate disposed  
3 adjacent said first bearing, said gear-like profile including an annular cavity defined by a  
4 recessed wall inset from and parallel to said swivel plate ~~sides~~ side face and bounded on its an  
5 inner diameter by a cylindrical wall surface concentric with said bearings, said cavity recessed  
6 wall being bounded on ~~its~~ an outer periphery by a plurality of equally angularly spaced tooth  
7 peak surfaces that define an interrupted cylindrical surface of larger diameter than, and  
8 concentric with, said inner cylindrical wall surface, said gear-like profile further including a  
9 plurality of equally angularly spaced teeth root cavities extending entirely radially outwardly  
10 from said interrupted cylindrical surface, said cavities being individually arranged between each  
11 ~~of said pairs~~ adjacent pair of said tooth peak surfaces, and further including a locking pin  
12 supported by said bearing plate so as to be operable in said annular cavity to be spring biased  
13 into selective engagement with a selected one said teeth root cavities to thereby lock said  
14 rotatable swivel plate at a fixed angular position relative to the remaining components of said  
15 base assembly, and upon withdrawal of said locking pin from said selected tooth cavity thereby  
16 enabling free rotation of said swivel plate relative to the remaining components of said base  
17 assembly.

9. (Currently Amended)

1           The assembly set forth in ~~said~~ claim 8 including a locking lever pivotally mounted  
2 to said ~~bottom~~ bearing plate and carrying said locking pin, said bearing plate and said first  
3 bearing each having arcuate slots formed therein through which said locking pin extends into  
4 said annular cavity for swinging in an arcuate travel path between engaged and disengaged  
5 positions relative to said teeth root cavities of said gear-like profile in said swivel plate, said  
6 lever being pivotally mounted to operate as a lever of the first class with one end carrying said  
7 locking pin and the opposite end carrying an operating handle, and further including a coil  
8 spring coupled between said lever and one of said risers such that said lever is normally spring  
9 biased to pivot in a direction to drive said locking pin toward the root or bottom of ~~whichever~~  
10 ~~negative~~ said selected tooth ~~recess it is selectively registered~~ cavity.

10. (Original)

1           The assembly set forth in claim 9 wherein said lever handle is oriented to extend  
2 from said lever toward said mounting base plate.

11. (Currently Amended)

1           The assembly set forth in claim 9 wherein said lever handle is constructed and  
2 arranged such that it is swung in a direction outwardly away from said assembly to retract said  
3 locking pin out of registry with the selected ~~negative locking teeth~~ tooth cavity in said swivel  
4 plate and into ~~the annular space between said cylindrical wall, surface and said teeth apices~~ said  
5 annular cavity whereupon said swivel plate is free to swivel about the axis of said first and  
6 second bearings, and such that once unlocking force is removed from said lever by releasing said

7 handle said spring is operable to bias said lever to force said locking pin against whichever tooth  
8 ~~apex~~ peak surface it may be registered, whereupon swivel motion of said swivel plate that  
9 registers said locking pin with an adjacent tooth cavity allows spring bias on said lever to snap  
10 force said pin into such cavity.

12. (Original)

1 The assembly set forth in claim 11 wherein said swivel plate has twelve of said  
2 tooth cavities, thereby providing locking positions at 30° angular increments for a full 360°  
3 swivel traverse of said swivel plate.

13. (Currently Amended)

1 The assembly set forth in claim 11 wherein each of said tooth peak surfaces  
2 terminates at a ~~the~~ circumferentially spaced pair of tooth corners located at the circumferentially  
3 opposite ends of each said tooth apex are peak surface, said tooth corners being relatively sharp  
4 and have a small radius dimension to thereby produce a snap action drop in of said locking pin as  
5 said spring forces said lever in the lock-up direction.

14. (Currently Amended)

1 The assembly set forth in claim 11 wherein said ~~negative tooth recesses~~ teeth root  
2 cavities are each generated on a respective longitudinal centerline that is curved with the same  
3 radius as the arcuate path of travel of said locking pin whereby upon said lever being released,  
4 such curvature of each tooth ~~recess~~ cavity allows a quick drop in action of said locking pin upon

5 being initially registered with a selected tooth ~~recess~~ cavity and then forced into such ~~recess~~  
6 tooth cavity under the biasing force of said spring.

15. (Currently Amended)

1 The assembly set forth in claim 8 wherein ~~the sidewalls of~~ each said tooth ~~recess~~  
2 cavity has a pair of juxtaposed sidewalls that are tapered so as to converge slightly radially  
3 outwardly of said annular cavity and toward ~~the~~ an associated root surface of each said ~~recess~~  
4 tooth cavity such that said pair of tooth ~~recess~~ cavity sidewalls ~~reach~~ are spaced apart by a  
5 transverse dimension less than the diameter of said locking pin at a point in the travel path of  
6 said pin into any selected one of said tooth cavities such that the locking pin cannot touch the  
7 bottom of said root surface of said selected tooth ~~recess~~ cavity such that said locking pin seats, in  
8 locked position, against said sidewalls of ~~the associated~~ said selected tooth ~~recess~~ cavity without  
9 bottoming in the same.

16. (Currently Amended)

1 An adjustable swivel base assembly and track combination for swivel mounting  
2 on a fishing boat of downrigger and/or planar board masts used for fishing, said assembly  
3 comprising:

- 4 (a) a planar mounting base plate,  
5 (b) a pair of laterally spaced apart columnar supports affixed at a longitudinal  
6 bottom end thereof to said base plate and extending perpendicularly upwardly therefrom,  
7 (c) a planar ~~bottom~~ bearing plate stationarily supported on a longitudinal  
8 upper end of each said support opposite said bottom end thereof,



(d) a planar bottom bearing stationarily supported on said bearing plate on the  
an upper side thereof remote from said supports,

(e) a planar top bearing stationarily affixed to said bearing plate and spaced  
upwardly therefrom and coaxial with said bottom bearing,

(f) a planar rotatable swivel top plate supported on and sandwiched slidably  
between said top and bottom bearings for rotation in a plane generally parallel to the major  
planes of said base plate and said bearings, said rotatable swivel plate being adapted to carry a  
downrigger and/or planar board mast load to be swiveled by said rotation of said rotatable swivel  
top plate,

(g) an indexable locking system for selectively locking said rotatable swivel  
top plate in any one of a plurality of angularly spaced positions, and

(h) a mounting track adapted to be mounted on a gunnel or transom of a  
fishing boat, said track having side edge flanges with mutually facing in-turned lips, said  
assembly base plate being slidably mounted in said track with said track flange lips overlapping  
said a pair of opposite side edges of said base plate, said base plate carrying locking means for  
releasably locking said base plate at a desired location along said track.

#### 17. (Currently Amended)

The combination set forth in claim 16 wherein said supports comprise a pair of  
obround risers each having an obround exterior contour and being symmetrically mounted to  
said base plate and having generally flat facing side surfaces with an angled orientation relative  
to one another such that ~~their major planes~~ said facing surfaces define an included angle  
therebetween of about 40°.

18. (Original)

1           The combination set forth in claim 17 wherein each said riser is made as an  
2 aluminum extrusion having a cross sectional contour to form the obround contour whereby the  
3 riser has parallel flat side walls merging with semicircular end walls.

19. (Currently Amended)

1           The combination set forth in claim 18 wherein the interior surface of each said  
2 ~~curved~~—riser semicircular end wall has individually associated therewith an integral,  
3 longitudinally extending screw boss defining an interior channel with a circular wall surface  
4 encompassing about 270° and having a diameter for slidably receiving ~~therethrough~~ therein an  
5 associated mounting screw inserted through an associated hole in said base plate and threadably  
6 secured at one end thereof in said bearing plate such that said bearing plate is fixably and  
7 securely screw-mounted on and supported by said risers which in turn are thereby securely  
8 screw-affixed to and supported by said mounting base plate.

20. (Original)

1           The combination set forth in claim 16 wherein said swivel plate has a central  
2 through-hole defined by a bearing bore extending from a planar bottom side of said swivel plate  
3 adjacent said first bottom bearing to a junction at an annular shoulder with a bearing counterbore  
4 in said swivel plate that in turn opens to an upper planar side of said swivel plate remote from  
5 said bottom bearing, and wherein said bottom bearing has a raised circular central bearing boss  
6 received with a close clearance sliding fit in said bearing bore such that said bottom side of said

7 swivel plate rides slidably on an adjacent upper surface of said bottom bearing that encircles said  
8 bottom bearing boss, and wherein said top bearing also has a bearing boss portion that fits  
9 slidably within said plate bearing bore and has a radially extending marginal flange portion that  
10 rides slidably on said annular shoulder of said swivel plate through-hole defining said bearing  
11 bore and wherein said swivel plate is clamped by and between said top and bottom bearings,  
12 both of which are held affixed by studs extending to and fastened to said stationary bearing plate.

21. (Currently Amended)

1 The combination set forth in claim 20 wherein said top and bottom bearings are  
2 made of plastic ~~such as ultra-high molecular weight (UHMW) polyethylene plastic material~~, and  
3 wherein said top and bottom bearings are backed up ~~with metal cover plates both top and bottom,~~  
4 ~~i.e.,~~ respectively by a top metal bearing cover plate overlying said top bearing, and by said  
5 bottom bearing plate with said bottom bearing plate being made of metal to serve as the bottom  
6 bearing back-up metal cover plate, and ~~further including fasteners wherein said studs are~~  
7 constructed and arranged to extend through the assembly of said top and bottom bearings as well  
8 as said top bearing cover plate and said bearing plate and tensioned to a predetermined torque to  
9 minimize play or loose fit of said swivel plate and yet still allow the rotatable swivel plate to  
10 swivel freely relative to the remaining components of said base assembly.

22. (Currently Amended)

1           The combination set forth in claim 21 wherein said swivel plate is provided with a  
2   predetermined universal pattern of threaded through-holes ~~adjacent one side of said swivel plate~~  
3   ~~bearings, as well as a mirror image symmetrical array of similar mounting holes adjacent the~~  
4   ~~other side of said swivel plate bearings~~, said through holes being predetermined by design to  
5   match up with the mounting bolt pattern ~~of the most popular models of downrigger and/or or~~  
6   planar board masts mounting platforms of various configurations that are to be removably  
7   attached to said rotatable swivel plate by mounting fasteners ~~such as thumbscrews, threaded~~  
8   ~~studs or the like.~~

23. (Currently Amended)

1           The combination set forth in claim 20 wherein said indexable locking system  
2   comprises a negative gear-like profile formed in ~~said~~ a side face of said swivel plate disposed  
3   adjacent said bottom bearing, said gear-like profile including an annular cavity defined by a  
4   recessed wall inset from and parallel to said swivel plate ~~sides~~ side face and bounded on ~~its~~ an  
5   inner diameter by a cylindrical wall surface concentric with said bearings, said cavity recessed  
6   wall being bounded on ~~its~~ an outer periphery by equally angularly spaced tooth peak surfaces  
7   that define an interrupted cylindrical surface of larger diameter than, and concentric with, said  
8   inner cylindrical wall surface, said gear-like profile further including a plurality of equally  
9   angularly spaced teeth root cavities extending entirely radially outwardly from said interrupted  
10   cylindrical surface, said cavities being individually arranged between each ~~of said pairs~~ adjacent  
11   pair of said tooth peak surfaces, and further including a locking pin operably supported by said  
12   bearing plate so as to be operable in said annular cavity to be spring biased into selective

13 engagement with a selected one of said teeth root cavities to thereby lock said rotatable swivel  
14 plate at a fixed angular position relative to the remaining components of said base assembly, and  
15 withdrawal of said locking pin from said selected tooth cavity thereby enabling free rotation of  
16 said swivel plate relative to the remaining components of said base assembly.

24. (Currently Amended)

1 The combination set forth in said claim 23 including a locking lever pivotally  
2 mounted to said ~~bottom~~ bearing plate and carrying said locking pin, said bearing plate and said  
3 bottom bearing each having arcuate slots formed therein through which said locking pin extends  
4 into said annular cavity for swinging in an arcuate travel path between engaged and disengaged  
5 positions relative to said teeth root cavities of said gear-like profile in said swivel plate, said  
6 lever being pivotally mounted to operate as a lever of the first class with one end carrying said  
7 locking pin and the opposite end carrying an operating handle, and further including a coil spring  
8 coupled between said lever and a stationary component of said base assembly such that said  
9 lever is normally spring biased to pivot in a direction to drive said locking pin toward the root or  
10 bottom of ~~whichever negative~~ said selected tooth ~~recess it is selectively registered~~ cavity.

25. (Original)

1 The combination set forth in claim 24 wherein said lever handle is oriented to  
2 extend downwardly from said lever toward said mounting base plate.

26. (Currently Amended)

1           The combination set forth in claim 25 wherein said lever handle is constructed  
2 and arranged such that it is swung in a direction outwardly away from said assembly to retract  
3 said locking pin out of registry with the selected ~~negative-locking-teeth~~ tooth cavity in said  
4 swivel plate and into ~~the annular space between said cylindrical wall surface and said teeth~~  
5 ~~apices~~ said annular cavity whereupon said swivel plate is free to swivel about the axis of said top  
6 and bottom bearings, and such that once unlocking force is removed from said lever by releasing  
7 said handle said spring is operable to bias said lever to force said locking pin against whichever  
8 tooth ~~apex~~ peak surface it may be registered, whereupon swivel motion of said swivel plate that  
9 registers said locking pin with an adjacent tooth cavity allows spring bias on said lever to snap  
10 force said pin into such cavity.

27. (Original)

1           The combination set forth in claim 26 wherein said swivel plate has twelve of said  
2 tooth cavities, thereby providing locking positions at 30° angular increments for a full 360°  
3 swivel traverse of said swivel plate.

28. (Currently Amended)

1           The combination set forth in claim 26 wherein ~~the~~ each of said tooth peak  
2 surfaces terminates at a circumferentially spaced pair of tooth corners located at the  
3 circumferentially opposite ends of each said tooth apex are peak surface, said tooth corners being  
4 relatively sharp and have a small radius dimension to thereby produce a snap action drop in of  
5 said locking pin as said spring forces said lever in the lock-up direction.

29. (Currently Amended)

1           The combination set forth in claim 26 wherein said ~~negative tooth recesses~~ teeth  
2 root cavities are individually generated along a respective longitudinal centerline that is curved  
3 with the same radius as the arcuate path of travel of said locking pin whereby upon said lever  
4 being released, such curvature of each tooth ~~recess~~ cavity allows a quick drop in action of said  
5 locking pin upon being initially registered with a selected tooth ~~recess~~ cavity and then forced into  
6 such ~~recess~~ tooth cavity under the biasing force of said spring.

30. (Currently Amended)

1           The combination set forth in claim 29 wherein ~~the sidewalls of~~ each said tooth  
2 ~~recess~~ cavity has a pair of juxtaposed sidewalls that are tapered so as to converge slightly radially  
3 outwardly of said annular cavity and toward the an associated root surface of each said ~~recess~~  
4 tooth cavity such that said tooth ~~recess~~ cavity sidewalls of each ~~recess~~ tooth cavity ~~reach~~ are  
5 spaced apart by a transverse tooth cavity dimension less than the diameter of said locking pin at a  
6 point in the travel path of said pin in ~~each said recess~~ any selected one of said teeth cavities such  
7 that the locking pin cannot touch the bottom of said root surface of each said selected tooth  
8 ~~recess~~ cavity and such that said locking pin seats, in locked position, against said sidewalls of  
9 each said selected tooth ~~recess~~ cavity without bottoming in the same.

31. (Currently Amended)

1 A method for swivel mounting on a fishing boat of downrigger and/or planar  
2 board masts used for fishing, said method comprising the steps of:

3 (a) providing a planar mounting base plate,

4 (b) providing a pair of laterally spaced apart columnar supports affixed at a  
5 longitudinal bottom end thereof to said base plate and extending perpendicularly upwardly  
6 therefrom,

7 (c) providing a planar ~~bottom~~ bearing plate stationarily supported on a  
8 longitudinal upper end of each said support opposite said bottom end thereof,

9 (d) providing a planar bottom bearing stationarily supported on said bearing  
10 plate on ~~the~~ an upper side thereof remote from said supports,

11 (e) providing a planar top bearing stationarily affixed to said bearing plate and  
12 spaced upwardly therefrom and coaxial with said bottom bearing,

13 (f) providing a planar rotatable swivel top plate supported on and sandwiched  
14 slidably between said top and bottom bearings for rotation in a plane generally parallel to the  
15 major planes of said base plate and said bearings, said rotatable swivel plate being adapted to  
16 carry a downrigger and/or planar board mast load to be swiveled by said rotation of said rotatable  
17 swivel top plate,

18 (g) providing an indexable locking system for selectively locking said  
19 rotatable swivel top plate in any one of a plurality of angularly spaced positions, and

20 (h) providing a mounting track mounted on a gunnel or transom of the fishing  
21 boat, said track having side edge flanges with mutually facing in-turned lips, and slidably  
22 mounting said assembly base plate in said track with said track flange lips overlapping said a pair



23 of opposite side edges of said base plate, said base plate carrying locking means for releasably  
24 locking said base plate at a desired location along said track.

32. (Currently Amended)

1           The method set forth in claim 31 wherein said indexable locking system  
2 comprises a negative gear-like profile formed in said a side face of said swivel plate disposed  
3 adjacent said bottom bearing, said gear-like profile including an annular cavity defined by a  
4 recessed wall inset from and parallel to said swivel plate ~~sides~~ side face and bounded on its an  
5 inner diameter by a cylindrical wall surface concentric with said bearings, said cavity recessed  
6 wall being bounded on its an outer periphery by equally angularly spaced tooth peak surfaces  
7 that define an interrupted cylindrical surface of larger diameter than, and concentric with, said  
8 inner cylindrical wall surface, said gear-like profile further including a plurality of equally  
9 angularly spaced teeth root cavities extending entirely radially outwardly from said interrupted  
10 cylindrical surface, said cavities being individually arranged between each ~~of said pairs~~ adjacent  
11 pair of said tooth peak surfaces, and further including a locking pin operably supported by said  
12 bearing plate so as to be operable in said annular cavity to be spring biased into selective  
13 engagement with a selected one of said teeth root cavities to thereby lock said rotatable swivel  
14 plate at a fixed angular position relative to the remaining components of said base assembly, and  
15 withdrawal of said locking pin from said selected tooth cavity thereby enabling free rotation of  
16 said swivel plate relative to the remaining components of said base assembly.

33. (Currently Amended)

1           The method set forth in claim 32 including a locking lever pivotally mounted to  
2   said ~~bottom~~ bearing plate and carrying said locking pin, said bearing plate and said bottom  
3   bearing each having arcuate slots formed therein through which said locking pin extends into  
4   said annular cavity for swinging in an arcuate travel path between engaged and disengaged  
5   positions relative to said teeth root cavities of said gear-like profile in said swivel plate, said  
6   lever being pivotally mounted to operate as a lever of the first class with one end carrying said  
7   locking pin and the opposite end carrying an operating handle, and further including a coil spring  
8   coupled between said lever and a stationary component of said base assembly such that said  
9   lever is normally spring biased to pivot in a direction to drive said locking pin toward the root or  
10   bottom of ~~whichever negative~~ said selected tooth ~~recess it is selectively registered~~ cavity.

34. (Original)

1           The method set forth in claim 33 wherein said lever handle is oriented to extend  
2   downwardly from said lever toward said mounting base plate.

35. (Currently Amended)

1   The method set forth in claim 34 wherein said lever handle is constructed and arranged such that  
2   it is swung in a direction outwardly away from said assembly to retract said locking pin out of  
3   registry with the selected ~~negative locking teeth~~ tooth cavity in said swivel plate and into the  
4   ~~annular space between said cylindrical wall surface and said teeth apices~~ said annular cavity  
5   whereupon said swivel plate is free to swivel about the axis of said top and bottom bearings, and  
6   such that once unlocking force is removed from said lever by releasing said handle said spring is

7 operable to bias said lever to force said locking pin against whichever tooth ~~apex~~ peak surface it  
8 may be registered, whereupon swivel motion of said swivel plate that registers said locking pin  
9 with an adjacent tooth cavity allows spring bias on said lever to snap force said pin into such  
10 cavity.

36. (Currently Amended)

1 The method set forth in claim 35 wherein ~~the~~ each of said tooth peak surfaces  
2 terminates at a circumferentially spaced pair of tooth corners located at the circumferentially  
3 opposite ends of each tooth ~~apex are~~ peak surface, said tooth corners being relatively sharp and  
4 have a small radius dimension to thereby produce a snap action drop in of said locking pin as  
5 said spring forces said lever in the lock-up direction.

37. (Currently Amended)

1 The method set forth in claim 35 wherein said ~~negative-tooth-recesses~~ teeth root  
2 cavities are individually generated along a longitudinal centerline that is curved with the same  
3 radius as the arcuate path of travel of said locking pin whereby upon said lever being released,  
4 such curvature of each tooth ~~recess~~ cavity allows a quick drop in action of said locking pin upon  
5 being initially registered with a selected tooth ~~recess~~ cavity and then forced into such ~~recess~~  
6 tooth cavity under the biasing force of said spring.

38. (Currently Amended)

1           The method set forth in claim 37 wherein ~~the sidewalls~~ of each said tooth ~~recess~~  
2 cavity has a pair of juxtaposed sidewalls that are tapered so as to converge slightly radially  
3 outwardly of said annular cavity and toward ~~the~~ an associated root surface of each said ~~recess~~  
4 tooth cavity such that said tooth ~~recess~~ cavity sidewalls of each ~~recess-reach~~ tooth cavity are  
5 spaced apart by a transverse tooth cavity dimension less than the diameter of said locking pin at a  
6 point in the travel path of said pin in any selected one of said teeth cavities ~~each said recess~~ such  
7 that the locking pin cannot touch the bottom of said root surface of ~~each~~ said selected tooth  
8 ~~recess~~ cavity and such that said locking pin seats, in locked position, against said sidewalls of  
9 each said selected tooth ~~recess~~ cavity without bottoming in the same.